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| APPLICATION NO.                        | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------------------|-------------|----------------------|---------------------|------------------|
| 09/733,215                             | 12/08/2000  | Badri N. Prasad      | 6944                | 3483             |
| 25763                                  | 7590        | 12/19/2006           | EXAMINER            |                  |
| DORSEY & WHITNEY LLP                   |             |                      | PASS, NATALIE       |                  |
| INTELLECTUAL PROPERTY DEPARTMENT       |             |                      | ART UNIT            | PAPER NUMBER     |
| SUITE 1500                             |             |                      |                     | 3626             |
| 50 SOUTH SIXTH STREET                  |             |                      |                     |                  |
| MINNEAPOLIS, MN 55402-1498             |             |                      |                     |                  |
| SHORTENED STATUTORY PERIOD OF RESPONSE |             | MAIL DATE            | DELIVERY MODE       |                  |
| 3 MONTHS                               |             | 12/19/2006           | PAPER               |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|                              |                             |                     |  |
|------------------------------|-----------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b>      | <b>Applicant(s)</b> |  |
|                              | 09/733,215                  | PRASAD ET AL.       |  |
|                              | Examiner<br>Natalie A. Pass | Art Unit<br>3626    |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-31 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-31 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                                          |                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                                         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                     | Paper No(s)/Mail Date: ____                                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>25 September 2006</u> | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|                                                                                                                                          | 6) <input type="checkbox"/> Other: ____                           |

***Notice to Applicant***

1. This communication is in response to the response filed 21 September 2006. Claims 1-6, 8, 10-16, 18, 20-21, 23-25, and 27 have been amended. Grounds of rejection for claims 1-31 are presented in the instant application as set forth in detail below. The IDS filed 25 September 2006 has been entered and considered.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(A) Claim 8 recites the limitation "the relative risk" in line 2.

There is insufficient antecedent basis for these limitations in the claim.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-11, 13, 16-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over LASH (2001/0020229 A1) in view of Sexton, et al, U.S. Patent Number 5, 752, 236 for substantially the same reasons given in the previous Office Action (paper number 05032005). Further reasons appear hereinbelow.

(A) Claim 1 has been amended to include the recitation of

- ◆ "calculating a predicted future healthcare utilization for each of a plurality of members of a healthcare plan, wherein the predicted future healthcare utilization for each of the plurality of members is respectively calculated using stored claim data associated with each of the plurality of members," in lines 4-7;
- ◆ "compiling a data set and all associated stored claim data associated with the selected member," in lines 11-12;
- ◆ "wherein each intervention flag corresponds to a member attribute amenable to intervention," in line 16; and
- ◆ "and all associated claim data in the data set that contributes to the selected member's identification as high-cost," in lines 20-21.

As per newly amended claim 1, Lash and Sexton teach a method as analyzed and discussed in the previous Office Action (paper number 05032005), further comprising calculating a predicted future healthcare utilization for each of a plurality of members of a healthcare plan, wherein the predicted future healthcare utilization for each of the plurality of

members is respectively calculated using stored claim data associated with each of the plurality of members (Lash; Table 2, paragraphs [0036], [0038], [0050], [0053]-[0054]);

compiling a "subset" (reads on "data set") and all associated stored claim data associated with the selected member (Lash; paragraphs [0007], [0022]);

wherein each "high relevance" claims variable (reads on "intervention flag") corresponds to a member attribute amenable to intervention (LASH, paragraph [0025], [0040]-[0042], [0044]); and

and all associated claim data in the data set that contributes to the selected member's identification as high-cost (Lash; paragraphs [0007], [0022], [0036]-[0038], [0042]).

The remainder of claim 1 is rejected for the same reasons given in the prior Office Action (paper number 05032005, section 3, pages 2-4), and incorporated herein.

The motivations for combining the respective teachings of Lash and Sexton are as given in the rejection of claim 1 in the prior Office Action (paper number 05032005) and incorporated herein.

(B) Claim 8 has been amended to include the recitation of

- ♦ "where the relative risk is based at least partially on the predicted future healthcare utilization," in lines 2-3.

As per newly amended claim 8, Lash and Sexton teach a method as analyzed and discussed in the previous Office Action (paper number 05032005), further comprising

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where the relative risk is based at least partially on the predicted future healthcare utilization (LASH; paragraphs [0007], [0042], [0048], [0055]).

The remainder of claim 8 is rejected for the same reasons given in the prior Office Action (paper number 05032005, section 3, page 9), and incorporated herein.

The motivations for combining the respective teachings of Lash and Sexton are as given in the rejection of claim 1 in the prior Office Action (paper number 05032005) and incorporated herein.

(C) Claim 16 has been amended to include the recitation of

- ◆ "calculating a predicted future healthcare utilization for each of the plurality of members, wherein the predicted future healthcare utilization for each of the plurality of members is respectively calculated using stored claim data associated with each of the plurality of members," in lines 5-7;
- ◆ "compiling a data set from the plurality of electronically stored member records associated with the set of high-cost members and all associated stored claim data associated with the selected member," in lines 11-12; and
- ◆ "wherein the intervention flags correspond to a member attribute amenable to intervention," in lines 19-20.

As per newly amended claim 16, Lash and Sexton teach a method as analyzed and discussed in the previous Office Action (paper number 05032005), further comprising calculating a predicted future healthcare utilization for each of the plurality of members, wherein the predicted future healthcare utilization for each of the plurality of members is

respectively calculated using stored claim data associated with each of the plurality of members (Lash; Table 2, paragraphs [0036], [0038], [0050], [0053]-[0054]);

compiling a “subset” (reads on “data set”) from the plurality of electronically stored member records associated with the set of high-cost members and all associated stored claim data associated with the selected member (Lash; paragraphs [0007], [0022]), [0036]-[0038], [0042]); and

wherein the “high relevance” claims variables (reads on “intervention flags”) correspond to a member attribute amenable to intervention (LASH, paragraph [0025], [0040]-[0042], [0044]).

The remainder of claim 16 is rejected for the same reasons given in the prior Office Action (paper number 05032005, section 3, pages 4-7), and incorporated herein.

The motivations for combining the respective teachings of Lash and Sexton are as given in the rejection of claim 1 in the prior Office Action (paper number 05032005) and incorporated herein.

(D) Amended claim 21 repeats the features of amended claim 1 and is therefore rejected for the same reasons given above in the rejections of amended claim 1 and incorporated herein.

(E) Claim 27 has been amended to include the recitation of

- ♦ "subsequent to identifying the set of high-cost members and to calculating relative risk for each of the high-cost members, compiling a data set from the plurality of

electronically stored member records, wherein the data set includes at leads the calculated risk for each of the high cost members," in lines 5-7;

As per newly amended claim 27, Lash and Sexton teach a method as analyzed and discussed in the previous Office Action (paper number 05032005), further comprising subsequent to identifying the set of high-cost members and to calculating relative risk for each of the high-cost members, compiling a data set from the plurality of electronically stored member records, wherein the data set includes at leads the calculated risk for each of the high cost members (LASH; paragraphs [0007]-[0009], [0036]-[0037], [0050], [0060]).

The remainders of the changes to claim 27 repeat the features of the changes to claim 1 and are therefore rejected for the same reasons given above in the rejection of amended claim 1 above, and incorporated herein.

The remainder of claim 27 is rejected for the same reasons given in the prior Office Action (paper number 05032005, section 3, pages 7-9), and incorporated herein.

The motivations for combining the respective teachings of Lash and Sexton are as given in the rejection of claim 1 in the prior Office Action (paper number 05032005) and incorporated herein.

(F) As per the amendments to claims 2-6, 10-11, 13, 18, 20, 23-25, these appear to have been made merely to correct minor typographical or grammatical errors and to correct objections to the claims. While these changes render the language of the claims smoother and more consistent, they otherwise affect neither the scope and breadth of the claims as originally

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presented nor the manner in which the claims were interpreted by the Examiner when applying prior art within the previous Office Action.

As such, the recited claimed features are rejected for the same reasons given in the prior Office Action (paper number 05032005, section 3, pages 2-11), and incorporated herein.

(G) Claims 7, 9, 17, 19, 22, 26, 28-31 have not been amended and are rejected for the same reasons given in the previous Office Action (paper number 05032005, section 3, pages 9-11), and incorporated herein.

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over LASH (2001/0020229 A1) in view of Sexton, et al, U.S. Patent Number 5, 752, 236, as applied to claim 1 above and further in view of Lutgen et al. (US 2003/0167189A1) for substantially the same reasons given in the previous Office Action (paper number 05032005). Further reasons appear hereinbelow.

(H) As per the amendments to claim 12, these appear to have been made merely to correct minor typographical or grammatical errors and to correct objections to the claim. While these changes render the language of the claims smoother and more consistent, they otherwise affect neither the scope and breadth of the claim as originally presented nor the manner in which the claim was interpreted by the Examiner when applying prior art within the previous Office Action.

As such, the recited claimed features are rejected for the same reasons given in the prior Office Action (paper number 05032005, section 4, page 12), and incorporated herein.

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7. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over LASH (US2001/0020229 A1) in view of Sexton, et al, U.S. Patent Number 5, 752, 236, as applied to claim 1 above, and further in view of Lockwood et al. U.S. Patent Number 5, 845, 254 for substantially the same reasons given in the previous Office Action (paper number 05032005). Further reasons appear hereinbelow.

(A) As per the amendments to claims 14-15, these appear to have been made merely to correct minor typographical or grammatical errors and to correct objections to the claims. While these changes render the language of the claims smoother and more consistent, they otherwise affect neither the scope and breadth of the claims as originally presented nor the manner in which the claims were interpreted by the Examiner when applying prior art within the previous Office Action.

As such, the recited claimed features are rejected for the same reasons given in the prior Office Action (paper number 05032005, section 5, pages 12-13), and incorporated herein.

*Response to Arguments*

8. Applicant's arguments filed 21 September 2006 have been fully considered but they are not persuasive. Applicant's arguments will be addressed hereinbelow in the order in which they appear in the response filed 21 September 2006.

(A) At pages 10-13 of the 21 September 2006 response Applicant argues that the features in the Application are not taught or suggested by the applied references. In response, all of the limitations which Applicant disputes as missing in the applied references, including the newly added limitations of the amendment filed 21 September 2006, have been fully addressed by the Examiner as either being fully disclosed or obvious in view of the combined teachings of LASH, Sexton, Lutgen, and Lockwood, based on the logic and sound scientific reasoning of one ordinarily skilled in the art at the time of the invention, as detailed in the remarks and explanations given in the preceding sections of the present Office Action and in the prior Office Action (paper number 05032005), and incorporated herein. In particular, Examiner notes that the recited features of "compiling a data set and all associated stored claim data associated with [...] selected member[s]" and "wherein each intervention flag corresponds to a member attribute amenable to intervention" and analyzing the data set to identify intervention flags are taught by the combination of applied references. Please note that Examiner interprets Lash's recitation of "predetermined subset of claims data taken from a larger set of patient claims data. The claims data are organized by categories..." (Lash; paragraph [0007]) together with Lash's teachings of "population ... [...] ... is filtered, for example on the basis of the disease or diagnosed condition of the patient to filter the population" (Lash; paragraph [0037]) to teach a form of "compiling a data set and all associated stored claim data associated with [...] selected member[s];" and Examiner interprets Lash's teachings of "setting a threshold probability value and targeting those patients falling above the threshold probability value for preventative medical interventions" (Lash; paragraph [0012]) and "particular selection of these claims variables, the so-called "high relevance" claims variables [reads on "intervention flags"], is determined in accordance with

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multivariate statistical modeling methods and analysis" (emphasis added) (Lash; paragraph [0025]), together with Lash's teachings of "when a patient is identified as being a high service user, the organization can intervene with them to make sure the disease management efforts are focused on that patient so the cost and effort of servicing that patient will be reduced" and (Lash; paragraph [0040]) "[t]hose patients with a score above a certain level, for example 90%, can be isolated for direct intervention by the MCO" (Lash; paragraph [0041]) to teach a form of "wherein each intervention flag corresponds to a member attribute amenable to intervention" and analyzing the data set to identify intervention flags.

With regard to Applicant's assertion in paragraph 1 on page 11 of the 21 September 2006 response that "Lash does not disclose or suggest 'compiling a data set' ... or "any analysis of the data set to identify intervention flags'," Examiner respectfully disagrees, and notes that these features have been discussed earlier in this office action, and Examiner specifically notes the quoted teachings of LASH, as noted in the preceding paragraph of this Office Action.

With regard to Applicant's assertion in paragraph 2 on page 11 of the 21 September 2006 response that in the Sexton reference "any reference to 'cost' is in the context of life insurance costs for an insured instead of an insurer" and that "there is no reference to insured members being 'high-cost' customers," Examiner respectfully notes that this feature is not a recited claim limitation.

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With regard to Applicant's assertions in the last paragraph on page 11 of the 21 September 2006 response that "Sexton does not teach or suggest anywhere that a customer is identified as 'high-cost,'" Examiner respectfully disagrees. Examiner interprets Sexton's teachings of the process of evaluation of cost while creating insurance contracts, e.g. "[c]ontracts are developed using life insurance product data to develop tables from which death benefits and premium obligations, and usually cash values, are determined based upon an insured's gender, age and other risk factors," (Sexton ; Abstract) together with Sexton's teachings of "[t]o this would be added information from prospective customers relating to the insureds' gender, age, risk and the like ... " (Sexton; column 18, lines 60-64) and "... the cost factors of mortality, underwriting, commission and other usual expense factors will be heavily allocated to one or more of the policies ... The premium payments are allocated such that the policy with the highest cost factors will require a disproportionately higher premium payment ... " (Sexton; column 5, lines 54-62) as teaching a form of identification of a customer as high-cost.

At page 12, paragraph 1 of the 21 September 2006 response, Applicant argues that there is no suggestion to combine the references. In response to Applicant's argument, the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Furthermore, the Examiner recognizes that references cannot be arbitrarily altered or modified and that there must be some reason why one skilled in the art would be motivated to make the proposed modifications. And although the motivation or suggestion to make modifications must be articulated, it is respectfully submitted that there is no requirement that the motivation to make modifications must be expressly articulated within the references themselves. References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures, *In re Bozek*, 163 USPQ 545 (CCPA 1969).

The Examiner is concerned that the Applicant apparently ignores the mandate of the numerous court decisions supporting the position given above. The issue of obviousness is not determined by what the references expressly state but by what they would reasonably suggest to one of ordinary skill in the art, as supported by decisions in *In re Delisle* 406 Fed 1326, 160 USPQ 806; *In re Kell, Terry and Davies* 208 USPQ 871; and *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ 2d 1596, 1598 (Fed. Cir. 1988) (citing *In re Lalu*, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1988)). Further, it was determined in *In re Lamberti* et al 192 USPQ 278 (CCPA) that:

- (i) obvious does not require absolute predictability;
- (ii) non-preferred embodiments of prior art must also be considered; and
- (iii) the question is not express teaching of references but what they would suggest.

According to *In re Jacoby*, 135 USPQ 317 (CCPA 1962), the skilled artisan is presumed to know something more about the art than only what is disclosed in the applied references. In *In re Bode*, 193 USPQ 12 (CCPA 1977), every reference relies to some extent on knowledge of persons skilled in the art to complement that which is disclosed therein. In *In re Conrad* 169

USPQ 170 (CCPA), obviousness is not based on express suggestion, but what references taken collectively would suggest.

In the instant case, the Examiner respectfully notes that each and every motivation to combine the applied references is accompanied by select portions of the respective reference(s) which specifically support that particular motivation. As such, it is NOT seen that the Examiner's combination of references is unsupported by the applied prior art of record. Rather, it is respectfully submitted that explanation based on the logic and scientific reasoning of one ordinarily skilled in the art at the time of the invention that support a holding of obviousness has been adequately provided by the motivations and reasons indicated by the Examiner, *Ex parte Levengood* 28 USPQ 2d 1300 (Bd. Pat. App. & Inter., 4/22/93).

Moreover, Applicant apparently ignores the evidence given by the Examiner, namely, recitations of specific portions of the applied reference, express articulation of the combinations and the motivations for combinations, as well as the scientific and logical reasoning of one skilled in the art at the time of the invention, as given in the prior Office Action (paper number 05032005) and in the present communication. It is noted that in the previous Office Action, each and every claimed limitation was carefully analyzed and addressed in a detailed manner encompassing four different sections over twelve pages of text (see paper number 05032005, sections 2-5, pages 2-13).

As such, it is respectfully submitted that Applicant appears to view the applied references separately, without considering the knowledge of average skill in the art, and further fails to appreciate the breadth of the claim language that is presently recited.

At the last paragraph of page 12 to page 13 of the 21 September 2006 response, Applicant argues that the references fail to teach limitations of claims 12, and claims 14-15, and that "Examiner has not provided any evidence of motivation within the applied references to make the asserted combination." Examiner respectfully disagrees, and notes that these features and arguments have been discussed earlier in this office action.

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. **Any response to this final action should be mailed to:**

Box AF

Commissioner of Patents and Trademarks  
Washington D.C. 20231

**or faxed to:** (571) 273-8300.

For formal communications, please mark  
"EXPEDITED PROCEDURE".

For informal or draft communications, please label  
"PROPOSED" or "DRAFT" on the front page of the communication and do NOT sign the communication.

After Final communications should be labeled "Box AF."

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalie A. Pass whose telephone number is (571) 272-6774. The examiner can normally be reached on Monday through Thursday from 9:00 AM to 6:30 PM. The examiner can also be reached on alternate Fridays.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas, can be reached at (571) 272-6776. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist whose telephone number is (571) 272-3600.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Natalie A. Pass

December 11, 2006

  
Primary  
C. LUKE GILLIGAN  
PATENT EXAMINER